ABSTRACT

A circuit balancing valve includes a valve body having fluid flow passage extending therethrough. The fluid flow passage includes a fluid inlet passage-side in fluid communication with a supply line, and a fluid flow outlet passage-side in fluid communication with an outfeed line. A valve seat is provided in the valve body between the inlet and outlet flow passages, and a sealing member is selectively movable in the operation of the valve towards or away from the valve seat to restrict or permit fluid to flow from the inlet passage-side to the outlet passage-side. Fin members are disposed in the outlet passage. The fin members are provided as an axially elongated rib, with a radial spacing from each other of between about 45° and 135°. The inlet flow passage includes an enlarged diameter cylindrical section and a reduced diameter cylindrical section. A frustoconically shaped section disposed between the enlarged and reduced diameter sections, is characterized by a sidewall which tapers inwardly in a downstream direction. A respective pressure measuring probe is provided in communication with each cylindrical section to permit a measurement of the fluid pressures therein.